

MIDALLOY MASTERCOR™ E316LT1-1/4 AP CRYO LF (LOW FERRITE) FLUX-CORED WIRE

CLASSIFICATION

- AWS 5.22 Class E316LT1-1 and E316LT1-4 / ASME SFA 5.22 Class E316LT1-1 and E316LT1-4 flux cored wire.
- UNS# W31635 A# 8 F# 6

DESCRIPTION

- MIDALLOY Mastercor™ E316LT1-1/4 AP Cryo (low ferrite) is an all position flux-cored wire used to weld 304L and 316L stainless cryogenic applications.
- MIDALLOY Mastercor™ E316LT1-1/4 AP Cryo has excellent slag removal and runs with a spatter free globular transfer
- Carbon content value is controlled to be less than 0.03% and ferrite <5 FN.

APPLICATIONS

Base material plates such as 201, 304, 316, 316L, and 304L. This product has excellent toughness and lateral expansion for services down to -320°F. In some cases MIDALLOY E316LT1-1/4 AP Cryo can be used when low ferrite is required.

TYPICAL CHEMISTRY (Ferrite Number WRC 1992 -3)

C	Mn	Si	Cr	Ni	Mo	P	S	Cu	N
0.03	0.8	0.5	17.5	12.9	2.4	0.026	0.003	0.17	0.5

TYPICAL MECHANICAL PROPERTIES*

TENSILE STRENGTH	80,330 PSI
YIELD STRENGTH	54,955 PSI
ELONGATION IN 2"	38%
IMPACTS @ -320°F	44 ft-lb with 30 mils lateral expansion

*Note: Mechanical properties shown using 75% Argon / 25% CO₂ shielding gas. Strength levels are slightly lower when using 100% CO₂

OPTIMUM TYPICAL WELDING PARAMETERS (using 100% CO₂ shielding gas or 75 AR/25 CO₂)

DIAMETER	AMPERAGE	VOLTAGE	WFS (IPM)
.035"	100-170	23-26	265-525
.045"	120-200	24-28	250-425
1/16"	180-250	25-30	150-250

Optimum for 1/16" – 210 amps, 27 volts, and 200 IPM (for CO₂ gas use 2 more volts)

PRODUCT AVAILABILITY

.035", .045", and 1/16" Diameters

STANDARD PACKAGING

- 33 lb. spool

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